

Eastern Region Annual HIV Epidemiological Profile

Data reported through June 30, 2018



Center for HIV Surveillance, Epidemiology and Evaluation MARYLAND
Department of Health

Infectious Disease Prevention and Health Service Prevention and Health Promotion Administration http://phpa.health.maryland.gov/OIDEOR/CHSE Infectious Disease Prevention and Health Services Bureau 1-800-358-9001

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Section I - Background Information

HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the Maryland Department of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in
 correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to
 report patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health
 Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140).
 Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland
 Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2017. The most recent Centers for Disease Control and Prevention (CDC) estimate of the number of people living with undiagnosed HIV infection is 14.5 percent for the United States and 14.0 percent for Maryland in 2015. Using the CDC CD4 depletion model on Maryland surveillance data, the estimated number of people living with undiagnosed HIV infection in Maryland is 11.6 percent in 2016. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of case report data. Case report data are only available for cases receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

This epidemiological profile provides estimates of living Maryland diagnosed cases by current residence as of December 31, 2017. Residence at diagnosis and age at diagnosis are used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted to cases for which there is a case report form or laboratory test reported since January 1, 2009. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may still be residents of Maryland but have not received any HIV care during

the most recent nine and a half years. In addition, residence is dynamic and cases may have resided at multiple addresses that cannot all be represented in single time point estimates.

This epidemiological profile contains data for transgender HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2017. Historically, it has been difficult to fully present data by current gender identification. Data on transgender people has been limited in the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS). No reliable system exists for collecting or reporting gender identity and some agencies do not collect or have complete data on gender identity. This report is likely underreporting the number transgender HIV and AIDS cases because of challenges in accurately identifying and reporting gender identity in HIV surveillance.

Lastly, the completeness of reporting for race/ethnicity is variable in surveillance data. Definitions of race/ethnicity categories may vary across agencies and some agencies do not collect or have complete data on race/ethnicity. This report may be overreporting the number of Multiracial HIV and AIDS cases because of challenges in accurately identifying and reporting race/ethnicity in HIV surveillance.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and

previously diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, reports received through a certain time (six months after December 31st of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a sixmonth lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2017 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV from January 1,2017 to December 31, 2017, as reported by name through June 30, 2018.

To calculate the number of Living Cases we count all Reported Diagnoses from the beginning of the epidemic (all new cases each year) and subtract all Reported Deaths. For example, the Total Living HIV Cases on December 31, 2017 are the total reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of June 30, 2018 as reported by name through June 30, 2018.

Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ cells is less than 14 percent. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of VL, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's eHARS, June 30, 2018.

Population data by sex, age, and race/ethnicity are from the July 1, 2017 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2016 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from the Centers for Disease Control and Prevention's HIV Surveillance Supplemental Report published March 2018. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

Tabulation of Column Totals

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

Data Suppression

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

Exposure/risk data is not suppressed due to statistical adjustment resulting in the reporting of estimated or probable risk.

HIV Exposure Categories

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who report a history of sexual contact with other men and report injection drug use constitutes a separate transmission category.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

<u>Male-to-male Sexual Contact (MSM):</u> Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

<u>Injection Drug Use (IDU)</u>: Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

Heterosexual Contact (HET): Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Perinatal Exposure: Any baby born to an HIV positive mother.

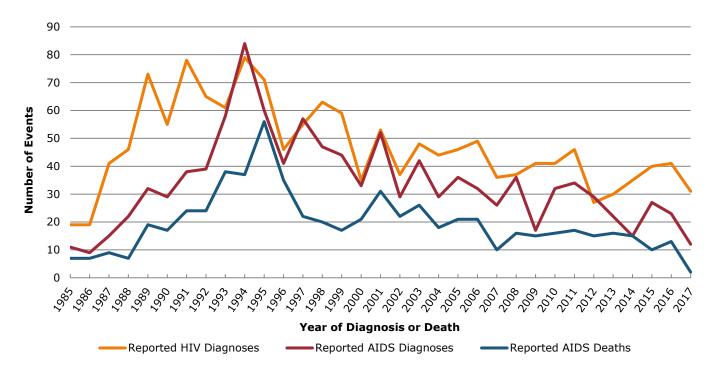
<u>Other Exposure</u>: Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing for some cases. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual case as well as data in aggregate from other cases in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates. Perinatal transmission and other exposure categories are never estimated or adjusted and depict the reported exposure category.

Section II - Trends 1985-2017

<u>Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2017 as Reported through June 30, 2018

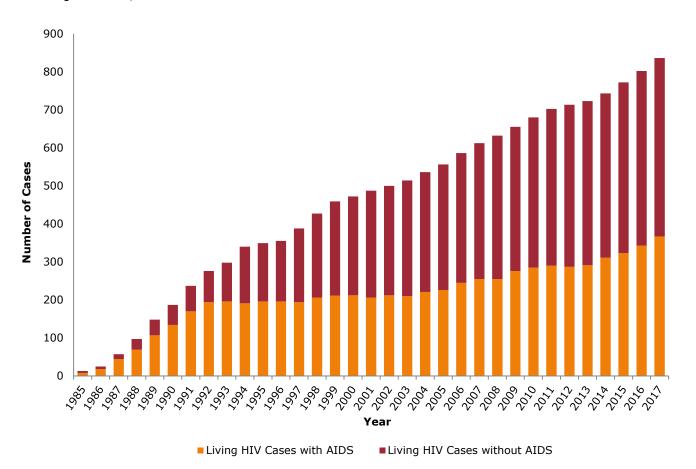


Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths	Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths
<1985	8	7	6	2001	53	52	31
1985	19	11	7	2002	37	29	22
1986	19	9	7	2003	48	42	26
1987	41	15	9	2004	44	29	18
1988	46	22	7	2005	46	36	21
1989	73	32	19	2006	49	32	21
1990	55	29	17	2007	36	26	10
1991	78	38	24	2008	37	36	16
1992	65	39	24	2009	41	17	15
1993	61	58	38	2010	41	32	16
1994	79	84	37	2011	46	34	17
1995	71	60	56	2012	27	29	15
1996	46	41	35	2013	30	22	16
1997	55	57	22	2014	35	15	15
1998	63	47	20	2015	40	27	10
1999	59	44	17	2016*	41	23	13
2000	35	33	21	2017*	31	12	2
				Total	1,555	1.119	650

^{*2016-2017} reported AIDS deaths are preliminary

<u>Figure 2 – Trends in Living HIV Cases, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2017, as Reported through June 30, 2018

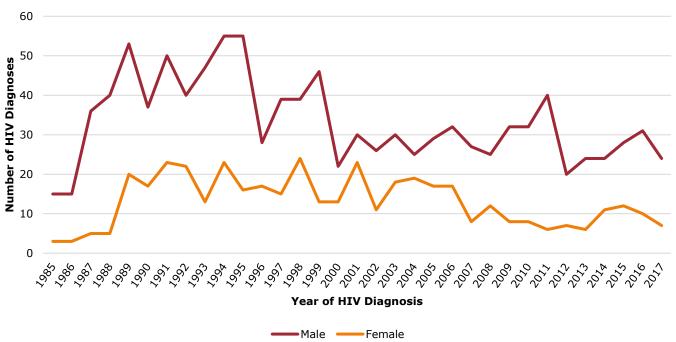


Year	Living HIV Cases without AIDS	Living HIV Cases with AIDS	Total Living HIV Cases	Year	Living HIV Cases without AIDS	Living HIV Cases with AIDS	Total Living HIV Cases
1986	18	7	25	2003	210	304	514
1987	44	13	57	2004	221	315	536
1988	69	28	97	2005	226	330	556
1989	107	41	148	2006	245	341	586
1990	134	53	187	2007	255	357	612
1991	170	67	237	2008	255	377	632
1992	194	82	276	2009	276	379	655
1993	196	102	298	2010	285	395	680
1994	191	149	340	2011	290	412	702
1995	196	153	349	2012	287	426	713
1996	196	159	355	2013	291	432	723
1997	194	194	388	2014	311	432	743
1998	206	221	427	2015	323	449	772
1999	211	248	459	2016	343	459	802
2000	212	260	472	2017	367	469	836
2001	206	281	487				

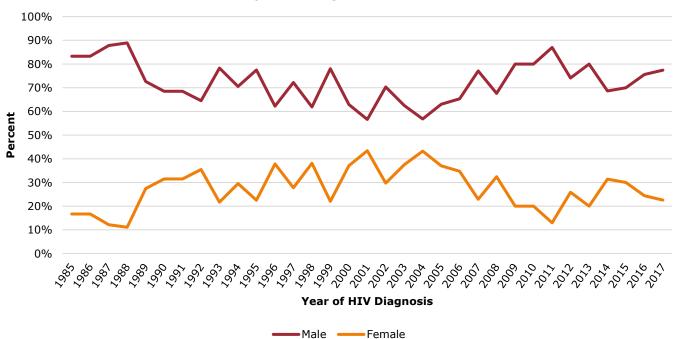
<u>Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Number and Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





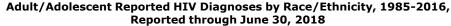
Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2017, Reported through June 30, 2018

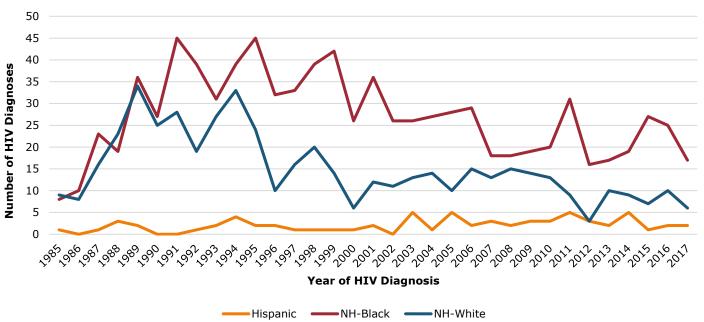


					Adult/Adolescent Reported HIV Diagnoses											
Year of HIV Diagnosis	Sex at Birth															
rear or mrs magnosis	No.	Male		Female												
		No.	%	No.	%											
<1985	8	7	87.5%	1	12.5%											
1985	18	15	83.3%	3	16.7%											
1986	18	15	83.3%	3	16.7%											
1987	41	36	87.8%	5	12.2%											
1988	45	40	88.9%	5	11.1%											
1989	73	53	72.6%	20	27.4%											
1990	54	37	68.5%	17	31.5%											
1991	73	50	68.5%	23	31.5%											
1992	62	40	64.5%	22	35.5%											
1993	60	47	78.3%	13	21.7%											
1994	78	55	70.5%	23	29.5%											
1995	71	55	77.5%	16	22.5%											
1996	45	28	62.2%	17	37.8%											
1997	54	39	72.2%	15	27.8%											
1998	63	39	61.9%	24	38.1%											
1999	59	46	78.0%	13	22.0%											
2000	35	22	62.9%	13	37.1%											
2001	53	30	56.6%	23	43.4%											
2002	37	26	70.3%	11	29.7%											
2003	48	30	62.5%	18	37.5%											
2004	44	25	56.8%	19	43.2%											
2005	46	29	63.0%	17	37.0%											
2006	49	32	65.3%	17	34.7%											
2007	35	27	77.1%	8	22.9%											
2008	37	25	67.6%	12	32.4%											
2009	40	32	80.0%	8	20.0%											
2010	40	32	80.0%	8	20.0%											
2011	46	40	87.0%	6	13.0%											
2012	27	20	74.1%	7	25.9%											
2013	30	24	80.0%	6	20.0%											
2014	35	24	68.6%	11	31.4%											
2015	40	28	70.0%	12	30.0%											
2016	41	31	75.6%	10	24.4%											
2017	31	24	77.4%	7	22.6%											
Total	1,536	1,103	71.8%	433	28.2%											

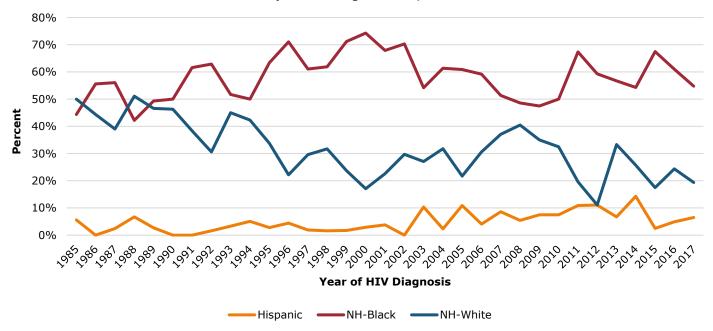
<u>Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity,</u> among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018

Number and Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2016, Reported through June 30, 2018

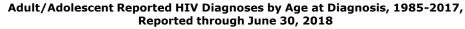


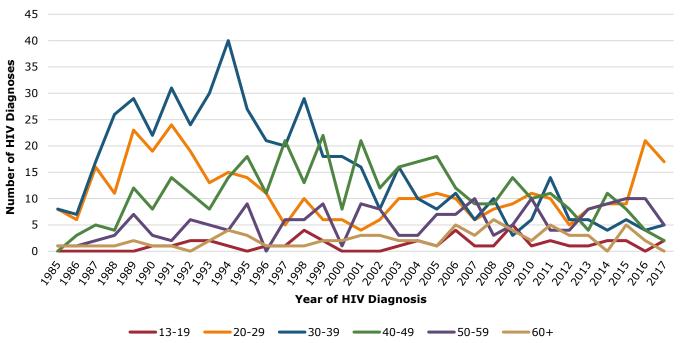
Non-Hispanic Other race not shown

	Adult/Adolescent Reported HIV Diagnoses												
Year of	_		Race/Ethnicity										
HIV Diagnosis	No.	Hispa	nic	Non-His Black,		Non-His White,		Non-Hispar Rac					
2.0305.5		No.	%	No.	%	No.	%	No.	<u>~</u>				
<1985	8	0	0.0%	5	62.5%	3	37.5%	0	0.0%				
1985	18	1	5.6%	8	44.4%	9	50.0%	0	0.0%				
1986	18	0	0.0%	10	55.6%	8	44.4%	0	0.0%				
1987	41	1	2.4%	23	56.1%	16	39.0%	1	2.4%				
1988	45	3	6.7%	19	42.2%	23	51.1%	0	0.0%				
1989	73	2	2.7%	36	49.3%	34	46.6%	1	1.4%				
1990	54	0	0.0%	27	50.0%	25	46.3%	2	3.7%				
1991	73	0	0.0%	45	61.6%	28	38.4%	0	0.0%				
1992	62	1	1.6%	39	62.9%	19	30.6%	3	4.8%				
1993	60	2	3.3%	31	51.7%	27	45.0%	0	0.0%				
1994	78	4	5.1%	39	50.0%	33	42.3%	2	2.6%				
1995	71	2	2.8%	45	63.4%	24	33.8%	0	0.0%				
1996	45	2	4.4%	32	71.1%	10	22.2%	1	2.2%				
1997	54	1	1.9%	33	61.1%	16	29.6%	4	7.4%				
1998	63	1	1.6%	39	61.9%	20	31.7%	3	4.8%				
1999	59	1	1.7%	42	71.2%	14	23.7%	2	3.4%				
2000	35	1	2.9%	26	74.3%	6	17.1%	2	5.7%				
2001	53	2	3.8%	36	67.9%	12	22.6%	3	5.7%				
2002	37	0	0.0%	26	70.3%	11	29.7%	0	0.0%				
2003	48	5	10.4%	26	54.2%	13	27.1%	4	8.3%				
2004	44	1	2.3%	27	61.4%	14	31.8%	2	4.5%				
2005	46	5	10.9%	28	60.9%	10	21.7%	3	6.5%				
2006	49	2	4.1%	29	59.2%	15	30.6%	3	6.1%				
2007	35	3	8.6%	18	51.4%	13	37.1%	1	2.9%				
2008	37	2	5.4%	18	48.6%	15	40.5%	2	5.4%				
2009	40	3	7.5%	19	47.5%	14	35.0%	4	10.0%				
2010	40	3	7.5%	20	50.0%	13	32.5%	4	10.0%				
2011	46	5	10.9%	31	67.4%	9	19.6%	1	2.2%				
2012	27	3	11.1%	16	59.3%	3	11.1%	5	18.5%				
2013	30	2	6.7%	17	56.7%	10	33.3%	1	3.3%				
2014	35	5	14.3%	19	54.3%	9	25.7%	2	5.7%				
2015	40	1	2.5%	27	67.5%	7	17.5%	5	12.5%				
2016	41	2	4.9%	25	61.0%	10	24.4%	4	9.8%				
2017	31	2	6.5%	17	54.8%	6	19.4%	6	19.4%				
Total	1,536	68	4.4%	898	58.5%	499	32.5%	71	4.6%				

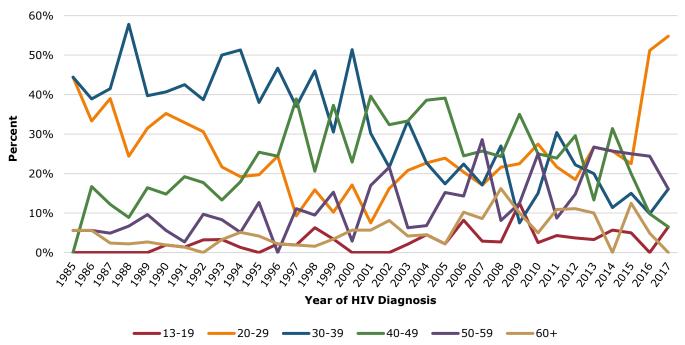
<u>Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Number and Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





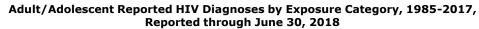
Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2017, Reported through June 30, 2018

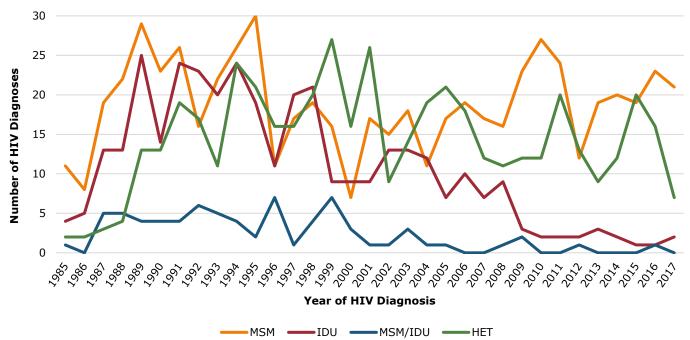


	Adult/Adolescent Reported HIV Diagnoses												
Year of HIV						Ag	je at HIV	Diagno	sis				
Diagnosis	No.	Age	13-19	Age 2	20-29	Age :	30-39	Age 4	40-49	Age	50-59	Age 60+	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	8	1	12.5%	2	25.0%	3	37.5%	1	12.5%	1	12.5%	0	0.0%
1985	18	0	0.0%	8	44.4%	8	44.4%	0	0.0%	1	5.6%	1	5.6%
1986	18	0	0.0%	6	33.3%	7	38.9%	3	16.7%	1	5.6%	1	5.6%
1987	41	0	0.0%	16	39.0%	17	41.5%	5	12.2%	2	4.9%	1	2.4%
1988	45	0	0.0%	11	24.4%	26	57.8%	4	8.9%	3	6.7%	1	2.2%
1989	73	0	0.0%	23	31.5%	29	39.7%	12	16.4%	7	9.6%	2	2.7%
1990	54	1	1.9%	19	35.2%	22	40.7%	8	14.8%	3	5.6%	1	1.9%
1991	73	1	1.4%	24	32.9%	31	42.5%	14	19.2%	2	2.7%	1	1.4%
1992	62	2	3.2%	19	30.6%	24	38.7%	11	17.7%	6	9.7%	0	0.0%
1993	60	2	3.3%	13	21.7%	30	50.0%	8	13.3%	5	8.3%	2	3.3%
1994	78	1	1.3%	15	19.2%	40	51.3%	14	17.9%	4	5.1%	4	5.1%
1995	71	0	0.0%	14	19.7%	27	38.0%	18	25.4%	9	12.7%	3	4.2%
1996	45	1	2.2%	11	24.4%	21	46.7%	11	24.4%	0	0.0%	1	2.2%
1997	54	1	1.9%	5	9.3%	20	37.0%	21	38.9%	6	11.1%	1	1.9%
1998	63	4	6.3%	10	15.9%	29	46.0%	13	20.6%	6	9.5%	1	1.6%
1999	59	2	3.4%	6	10.2%	18	30.5%	22	37.3%	9	15.3%	2	3.4%
2000	35	0	0.0%	6	17.1%	18	51.4%	8	22.9%	1	2.9%	2	5.7%
2001	53	0	0.0%	4	7.5%	16	30.2%	21	39.6%	9	17.0%	3	5.7%
2002	37	0	0.0%	6	16.2%	8	21.6%	12	32.4%	8	21.6%	3	8.1%
2003	48	1	2.1%	10	20.8%	16	33.3%	16	33.3%	3	6.3%	2	4.2%
2004	44	2	4.5%	10	22.7%	10	22.7%	17	38.6%	3	6.8%	2	4.5%
2005	46	1	2.2%	11	23.9%	8	17.4%	18	39.1%	7	15.2%	1	2.2%
2006	49	4	8.2%	10	20.4%	11	22.4%	12	24.5%	7	14.3%	5	10.2%
2007	35	1	2.9%	6	17.1%	6	17.1%	9	25.7%	10	28.6%	3	8.6%
2008	37	1	2.7%	8	21.6%	10	27.0%	9	24.3%	3	8.1%	6	16.2%
2009	40	5	12.5%	9	22.5%	3	7.5%	14	35.0%	5	12.5%	4	10.0%
2010	40	1	2.5%	11	27.5%	6	15.0%	10	25.0%	10	25.0%	2	5.0%
2011	46	2	4.3%	10	21.7%	14	30.4%	11	23.9%	4	8.7%	5	10.9%
2012	27	1	3.7%	5	18.5%	6	22.2%	8	29.6%	4	14.8%	3	11.1%
2013	30	1	3.3%	8	26.7%	6	20.0%	4	13.3%	8	26.7%	3	10.0%
2014	35	2	5.7%	9	25.7%	4	11.4%	11	31.4%	9	25.7%	0	0.0%
2015	40	2	5.0%	9	22.5%	6	15.0%	8	20.0%	10	25.0%	5	12.5%
2016	41	0	0.0%	21	51.2%	4	9.8%	4	9.8%	10	24.4%	2	4.9%
2017	31	2	6.5%	17	54.8%	5	16.1%	2	6.5%	5	16.1%	0	0.0%
Total	1,536	42	2.7%	372	24.2%	509	33.1%	359	23.4%	181	11.8%	73	4.8%
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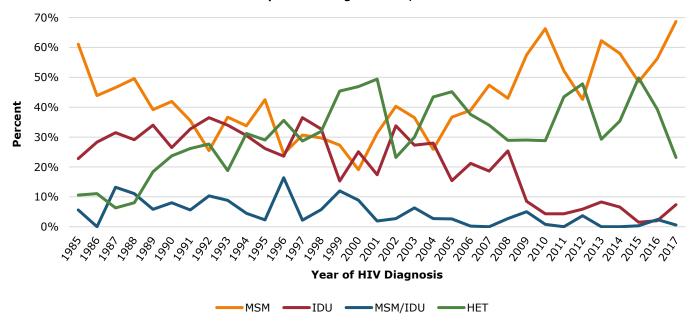
<u>Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated</u> <u>Exposure Category, among Residents at Diagnosis, 1985-2017, Reported through</u> June 30, 2018

Number and Percent by Estimated Exposure Category§ of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





Adult/Adolescent Reported HIV Diagnoses by Exposure Category, 1985-2017, Reported through June 30, 2018



Other exposure category not shown

§ Multiple imputation was used to estimate and adjust for missing transmission category.

				Adult/A	doles	ent Repor	rted HI	V Diagno	ses				
Year of						Estima	ted Ex	posure Ca	ategory§	}			
HIV Diagnosis	No.	% with No Reported		MSM		IDU	MSM	I/IDU	н	ET		Other Exposure	
Diagnosis		Exposure¥	No.	%	No.	%	No.	%	No.	%	No.	%	
<1985	8	25.0%	5	58.8%	1	16.3%	0	0.0%	1	12.5%	1	12.5%	
1985	18	5.6%	11	61.1%	4	22.8%	1	5.6%	2	10.6%	0	0.0%	
1986	18	5.6%	8	43.9%	5	28.3%	0	0.0%	2	11.1%	3	16.7%	
1987	41	9.8%	19	46.6%	13	31.5%	5	13.2%	3	6.3%	1	2.4%	
1988	45	8.9%	22	49.6%	13	29.1%	5	11.1%	4	8.0%	1	2.2%	
1989	73	2.7%	29	39.2%	25	34.0%	4	5.8%	13	18.4%	2	2.7%	
1990	54	5.6%	23	41.9%	14	26.5%	4	8.0%	13	23.7%	0	0.0%	
1991	73	5.5%	26	35.5%	24	32.7%	4	5.6%	19	26.2%	0	0.0%	
1992	62	8.1%	16	25.5%	23	36.5%	6	10.3%	17	27.7%	0	0.0%	
1993	60	10.0%	22	36.7%	20	34.0%	5	8.8%	11	18.8%	1	1.7%	
1994	78	14.1%	26	33.8%	24	30.5%	4	4.5%	24	31.2%	0	0.0%	
1995	71	14.1%	30	42.5%	19	26.2%	2	2.3%	21	29.0%	0	0.0%	
1996	45	13.3%	11	24.4%	11	23.6%	7	16.4%	16	35.6%	0	0.0%	
1997	54	9.3%	17	30.7%	20	36.5%	1	2.2%	16	28.7%	1	1.9%	
1998	63	15.9%	19	29.7%	21	32.7%	4	5.7%	20	31.9%	0	0.0%	
1999	59	8.5%	16	27.3%	9	15.3%	7	12.0%	27	45.4%	0	0.0%	
2000	35	8.6%	7	19.1%	9	25.1%	3	8.9%	16	46.9%	0	0.0%	
2001	53	5.7%	17	31.3%	9	17.4%	1	1.9%	26	49.4%	0	0.0%	
2002	37	21.6%	15	40.3%	13	33.8%	1	2.7%	9	23.2%	0	0.0%	
2003	48	10.4%	18	36.5%	13	27.3%	3	6.3%	14	30.0%	0	0.0%	
2004	44	15.9%	11	25.9%	12	28.0%	1	2.7%	19	43.4%	0	0.0%	
2005	46	23.9%	17	36.7%	7	15.4%	1	2.6%	21	45.2%	0	0.0%	
2006	49	18.4%	19	39.0%	10	21.2%	0	0.2%	18	37.6%	1	2.0%	
2007	35	20.0%	17	47.4%	7	18.6%	0	0.0%	12	34.0%	0	0.0%	
2008	37	27.0%	16	43.0%	9	25.4%	1	2.7%	11	28.9%	0	0.0%	
2009	40	17.5%	23	57.5%	3	8.5%	2	5.0%	12	29.0%	0	0.0%	
2010	40	22.5%	27	66.3%	2	4.3%	0	0.8%	12	28.8%	0	0.0%	
2011	46	17.4%	24	52.2%	2	4.3%	0	0.0%	20	43.5%	0	0.0%	
2012	27	14.8%	12	42.6%	2	5.9%	1	3.7%	13	47.8%	0	0.0%	
2013	30	13.3%	19	62.3%	3	8.3%	0	0.0%	9	29.3%	0	0.0%	
2014	35	20.0%	20	58.0%	2	6.6%	0	0.0%	12	35.4%	0	0.0%	
2015	40	12.5%	19	48.5%	1	1.5%	0	0.3%	20	49.8%	0	0.0%	
2016	41	14.6%	23	56.3%	1	2.0%	1	2.4%	16	39.3%	0	0.0%	
2017	31	9.7%	21	68.7%	2	7.4%	0	0.6%	7	23.2%	0	0.0%	
Total	1,536	12.7%	622	40.5%	351	22.9%	76	5.0%	475	30.9%	11	0.7%	

[§] Multiple imputation was used to estimate and adjust for missing transmission category

Note. Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1 percent of cases missing transmission category after multiple imputation

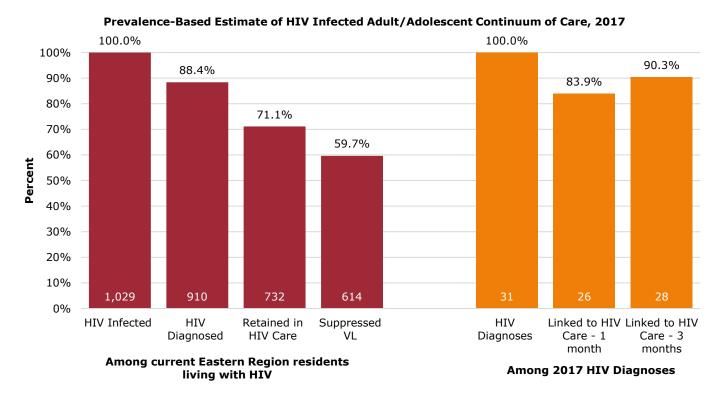
[¥]Percent with no reported exposure prior to multiple imputation adjustment

Section III - Continuum of Care Cascades

In their 2011 article in Clinical Infectious Diseases, Gardner et al. utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

<u>Figure 7 - Prevalence-Based Estimated Adult/Adolescent 2017 HIV Continuum of Care Cascades, Current Eastern Region Residents, Reported through June 30, 2018</u>

The prevalence-based Eastern Region Engagement in HIV Care Cascade (below) uses the most recent Centers for Disease Control and Prevention (CDC) CD4 depletion model to Maryland surveillance data, reported through June 2018, to estimate the number of people living with undiagnosed HIV (11.6 percent) and the estimated number of HIV infected persons currently residing in Maryland. Maryland surveillance data is then used to describe the number and percentage of persons living with HIV in the Eastern Region on December 31, 2017and the number and percentage of new HIV diagnoses in 2017 who belong to each of the stages of engagement in HIV care.



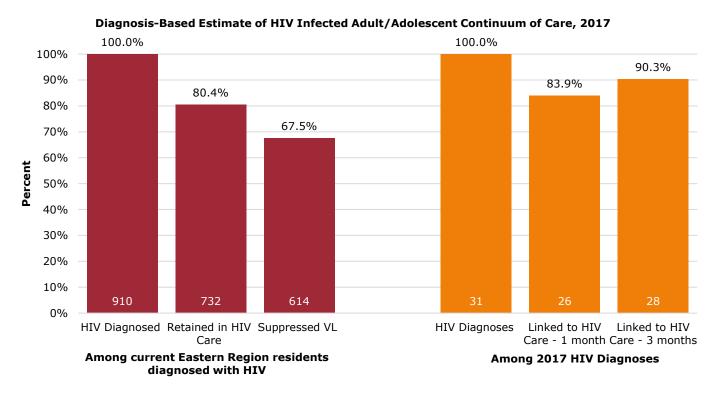
Continuum of Care Stage	Living F	IIV Cases	Combinuum of Comp Stone	New Diagnoses		
	Number	Percentage	Continuum of Care Stage	Number	Percentage	
HIV Infected	1,029	100.0%	New HIV Diagnoses	31	100.0%	
HIV Diagnosed	910	88.4%	Linked to HIV Care – 1 Month	26	83.9%	
Retained in HIV Care	732	71.1%	Linked to HIV Care – 3 Months	28	90.3%	
Suppressed VL	614	59.7%				

¹ Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 793-800.

² Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2010–2015. HIV Surveillance Supplemental Report 2018;23(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published March 2018.

<u>Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2017 HIV Continuum of Care Cascades, Current Eastern Region Residents, Reported through June 30, 2018</u>

The diagnosis-based Eastern Region Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Eastern Region residents to describe the number and percentage of persons living with HIV in the Eastern Region on December 31, 2017 and the number and percentage of new HIV diagnoses in 2017 who belong to each of the stages of engagement in HIV care.



Continuum of Care Stage	Living H	IV Cases	Continuum of Care Stage	New Diagnoses			
Continuum of Care Stage	Number	Percentage	Continuum of Care Stage	Number	Percentage		
HIV Diagnosed	910	100.0%	New HIV Diagnoses	31	100.0%		
Retained in HIV Care	732	80.4%	Linked to HIV Care - 1 Month	26	83.9%		
Suppressed VL	614	67.5%	Linked to HIV Care – 3 Months	28	90.3%		

Section IV - Adult/Adolescent Cases by Jurisdiction

<u>Table 1 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through June 30, 2018</u>

		Adult/Adolescent Reported HIV Diagnoses									
Jurisdiction of Residence at	Population Age 13+		% of	Rate -	Linked	Linked to Care			D4 Test sult		
HIV Diagnosis	Age 15+	No.	Total		% 1 mo.	% 3 mo.	%	%	Median Count		
Caroline	27,612	1	3.2%	3.6	***	***	***	***	***		
Cecil	86,423	5	16.1%	5.8	100.0%	100.0%	***	60.0%	285		
Dorchester	27,281	6	19.4%	22.0	83.3%	100.0%	***	100.0%	399		
Kent	17,211	1	3.2%	5.8	***	***	***	***	***		
Queen Anne's	42,415	0	0.0%	0.0							
Somerset	22,657	0	0.0%	0.0							
Talbot	32,341	0	0.0%	0.0							
Wicomico	86,680	16	51.6%	18.5	75.0%	81.3%	***	87.5%	436		
Worcester	45,380	2	6.5%	4.4	***	***	***	***	***		
Total	388,001	31	100.0%	8.0	83.9%	90.3%	***	87.1%	424		

^{***} Data withheld due to low population counts and/or case counts

<u>Table 2 – Adult/Adolescent AIDS Diagnoses during 2017, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through June 30, 2018</u>

			Adult/Adolescer	nt Reported A	IDS Diagnoses	5
Jurisdiction of Residence at AIDS Diagnosis	Population Age 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis
Caroline	27,612	1	8.3%	3.6	***	***
Cecil	86,423	2	16.7%	2.3	***	***
Dorchester	27,281	2	16.7%	7.3	***	***
Kent	17,211	0	0.0%	0.0		
Queen Anne's	42,415	1	8.3%	2.4	***	***
Somerset	22,657	1	8.3%	4.4	***	***
Talbot	32,341	1	8.3%	3.1	***	***
Wicomico	86,680	4	33.3%	4.6	***	***
Worcester	45,380	0	0.0%	0.0		
Total	388,001	12	100.0%	3.1	8.3	50

^{***} Data withheld due to low population counts and/or case counts

<u>Table 3 – Adult/Adolescent HIV Cases Alive on December 31, 2017, by Jurisdiction of</u> Residence at Diagnosis, Reported through June 30, 2018

Jurisdiction of Residence at	Population	Adult/Adolescent Living HIV Cases without AIDS			Adult/Adolescent Living HIV Cases with AIDS			Adult/Adolescent Total Living HIV Cases			
Diagnosis	Age 13+ -	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Caroline	27,612	31	8.5%	112.3	35	7.5%	126.8	66	7.9%	239.0	418
Cecil	86,423	50	13.7%	57.9	64	13.7%	74.1	114	13.7%	131.9	758
Dorchester	27,281	49	13.4%	179.6	84	17.9%	307.9	133	16.0%	487.5	205
Kent	17,211	16	4.4%	93.0	20	4.3%	116.2	36	4.3%	209.2	478
Queen Anne's	42,415	14	3.8%	33.0	38	8.1%	89.6	52	6.2%	122.6	815
Somerset	22,657	25	6.8%	110.3	33	7.1%	145.6	58	7.0%	256.0	390
Talbot	32,341	26	7.1%	80.4	34	7.3%	105.1	60	7.2%	185.5	539
Wicomico	86,680	120	32.9%	138.4	116	24.8%	133.8	236	28.3%	272.3	367
Worcester	45,380	34	9.3%	74.9	44	9.4%	97.0	78	9.4%	171.9	581
Total	388,001	365	100.0%	94.1	468	100.0%	120.6	833	100.0%	214.7	465

<u>Table 4 – Adult/Adolescent HIV Cases Alive on December 31, 2017, by Jurisdiction of Residence at Diagnosis and Current Residence, Reported through June 30, 2018</u>

			Adult/Adolescent Total Living HIV Cases									
Jurisdiction of	Population	ı	Residence	at Diagno	sis		Current F	Rate Ratio (1 in X) 202.8 493 167.8 596 542.5 184 191.7 521 113.2 883		%		
Residence	Age 13+ -	No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate		Change		
Caroline	27,612	66	7.9%	239.0	418	56	6.2%	202.8	493	-15.2%		
Cecil	86,423	114	13.7%	131.9	758	145	15.9%	167.8	596	27.2%		
Dorchester	27,281	133	16.0%	487.5	205	148	16.3%	542.5	184	11.3%		
Kent	17,211	36	4.3%	209.2	478	33	3.6%	191.7	521	-8.3%		
Queen Anne's	42,415	52	6.2%	122.6	816	48	5.3%	113.2	883	-7.7%		
Somerset	22,657	58	7.0%	256.0	391	65	7.1%	286.9	348	12.1%		
Talbot	32,341	60	7.2%	185.5	539	70	7.7%	216.4	462	16.7%		
Wicomico	86,680	236	28.3%	272.3	367	252	27.7%	290.7	343	6.8%		
Worcester	45,380	78	9.4%	171.9	582	93	10.2%	204.9	487	19.2%		
Total	388,001	833	100.0%	214.7	466	910	100.0%	234.5	426	9.2%		

<u>Table 5 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on</u>
<u>December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30,</u>
2018

			Adult/Ad	lolescent Tot	al Living H	IV Cases		
Jurisdiction of Current				Recent	CD4 Test	Result		
Residence	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Caroline	56	40	71.4%	671	2.5%	17.5%	10.0%	70.0%
Cecil	145	90	62.1%	612	6.7%	10.0%	15.6%	67.8%
Dorchester	148	119	80.4%	580	5.9%	13.4%	21.8%	58.8%
Kent	33	28	84.8%	623	3.6%	17.9%	21.4%	57.1%
Queen Anne's	48	38	79.2%	609	7.9%	15.8%	13.2%	63.2%
Somerset	65	50	76.9%	610	10.0%	14.0%	12.0%	64.0%
Talbot	70	56	80.0%	533	16.1%	12.5%	17.9%	53.6%
Wicomico	252	188	74.6%	524	12.8%	12.8%	20.2%	54.3%
Worcester	93	81	87.1%	681	8.6%	7.4%	14.8%	69.1%
Total	910	690	75.8%	589	9.1%	12.6%	17.5%	60.7%

<u>Table 6 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive</u> on December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30, 2018

		Adult/Adole	scent Total Livin	g HIV Cases						
Jurisdiction of Current		Recent Viral Load Test Result								
Residence	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
Caroline	56	41	73.2%	92.7%	21,300					
Cecil	145	89	61.4%	87.6%	14,600					
Dorchester	148	118	79.7%	90.7%	1,010					
Kent	33	29	87.9%	89.7%	4,350					
Queen Anne's	48	39	81.3%	92.3%	35,130					
Somerset	65	48	73.8%	85.4%	11,400					
Talbot	70	58	82.9%	91.4%	1,400					
Wicomico	252	197	78.2%	81.7%	19,405					
Worcester	93	82	88.2%	90.2%	21,490					
Total	910	701	77.0%	87.6%	12,002					

Section V - Cases by Age

<u>Table 7 – HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4</u> <u>Test Result by Age at HIV Diagnosis, Reported through June 30, 2018</u>

					Reported	HIV Diag	noses		
Age at HIV Diagnosis	Population		% of		Linked to Care		Late HIV Diagnoses	First CD4 Resu	
Diagnosis		No.	Total	Rate -	% 1 mo.	% 3 mo.	%	%	Median Count
<5 (Pediatric)	24,297	0	0.0%	0.0					
5-12 (Pediatric)	42,591	0	0.0%	0.0					
13-19	41,407	2	6.5%	4.8	***	***	***	***	***
20-29	59,076	17	54.8%	28.8	88.2%	88.2%	11.8%	94.1%	426
30-39	49,962	5	16.1%	10.0	100.0%	100.0%	0.0%	100.0%	373
40-49	52,215	2	6.5%	3.8	***	***	***	***	***
50-59	66,705	5	16.1%	7.5	80.0%	100.0%	20.0%	60.0%	482
60+	118,636	0	0.0%	0.0					
Total	454,889	31	100.0%	6.8	83.9%	90.3%	12.9%	87.1%	424

^{***} Data withheld due to low population counts and/or case counts

<u>Table 8 – HIV Cases Alive on December 31, 2017, by Age on December 31, 2017, Reported through June 30, 2018</u>

Age on			То	tal Living HIV Cases	5	
December 31, 2017	Population	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
<5	24,297	0	0.0%	0.0%	0.0	
5-12	42,591	4	0.4%	25.0%	9.4	10,647
13-19	41,407	9	1.0%	33.3%	21.7	4,600
20-29	59,076	83	9.1%	22.9%	140.5	711
30-39	49,962	131	14.3%	49.6%	262.2	381
40-49	52,215	192	21.0%	59.4%	367.7	271
50-59	66,705	309	33.8%	69.9%	463.2	215
60+	118,636	186	20.4%	71.5%	156.8	637
Total	454,889	914	100.0%	60.3%	200.9	497

<u>Table 9 - CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Age on December 31, 2017, Reported through June 30, 2018</u>

A			Adult/A	dolescent Tot	al Living HI	V Cases						
Age on - December 31,		Recent CD4 Test Results										
2017	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
13-19	9	6	66.7%	549	16.7%	0.0%	33.3%	50.0%				
20-29	83	64	77.1%	630	4.7%	9.4%	14.1%	71.9%				
30-39	131	95	72.5%	616	11.6%	16.8%	11.6%	60.0%				
40-49	192	136	70.8%	575	11.8%	8.1%	20.6%	59.6%				
50-59	309	249	80.6%	569	9.6%	12.9%	17.3%	60.2%				
60+	186	140	75.3%	577	5.7%	15.7%	20.0%	58.6%				
Total	910	690	75.8%	589	9.1%	12.6%	17.5%	60.7%				

<u>Table 10 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Age on December 31, 2017, Reported through June 30, 2018</u>

A		Adult/Adol	escent Total Living I	HIV Cases					
Age on — December 31,		Recent Viral Load Test Result							
2017	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
13-19	9	5	55.6%	60.0%	342,300				
20-29	83	70	84.3%	70.0%	6,820				
30-39	131	95	72.5%	74.7%	9,396				
40-49	192	144	75.0%	90.3%	9,035				
50-59	309	251	81.2%	92.8%	15,850				
60+	186	136	73.1%	94.1%	8,890				
Total	910	701	77.0%	87.6%	12,002				

Section VI - Adult/Adolescent Cases by Demographics

<u>Table 11 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2018</u>

				Adult/Ad	lolescent	Reported	HIV Diagnose	s	
Demographic Characteristics	Population Age 13+	NI -	% of	D-4-	Linked	to Care	Late HIV Diagnoses	First CI Res	
Characteristics	Age 13+	No.	Total	Rate	% 1 mo.	% 3 mo.	%	%	Median Count
Sex at Birth									
Male	188,086	24	77.4%	12.8	83.3%	91.7%	8.3%	91.7%	426
Female	199,915	7	22.6%	3.5	85.7%	85.7%	28.6%	71.4%	285
Gender									
Male		21	67.7%		***	***	***	***	***
Female		7	22.6%		***	***	***	***	***
Transgender Female		3	9.7%		***	***	***	***	***
Transgender Male		0	0.0%						
Another Gender Identity		0	0.0%						
Race/Ethnicity									
Hispanic	15,906	2	6.5%	12.6	***	***	***	***	***
Non-Hispanic	372,094	29	93.5%	7.8	82.8%	89.7%	13.8%	86.2%	424
American Indian/Alaska Native, only	1,045	0	0.0%	0.0					
Asian, only	6,407	0	0.0%	0.0					
Black, only	62,396	17	54.8%	27.2	82.4%	82.4%	11.8%	88.2%	424
Native Hawaiian/Other Pacific Islander, only	136	0	0.0%	0.0					
White, only	296,469	6	19.4%	2.0	***	***	***	***	***
Multiracial/Other	5,641	6	19.4%	106.4	83.3%	100.0%	16.7%	100.0%	318
Total	388,001	31	100.0%	8.0	83.9%	90.3%	12.9%	87.1%	424
Country of Birth									
United States	361,997	29	93.5%	8.0	86.2%	93.1%	6.9%	86.2%	427
Foreign-Born	21,918	1	3.2%	4.6	***	***	***	***	***
Africa		0	0.0%						
Asia		0	0.0%						
Caribbean		1	3.2%		***	***	***	***	***
Central America		0	0.0%						
Other		0	0.0%						
Unknown		1	3.2%		***	***	***	***	***
Total	383,914	31	100.0%	8.1	83.9%	90.3%	12.9%	87.1%	424

Note. Population data by sex at birth, age, and race/ethnicity are from the 2017 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2016 American Community Survey.

^{***} Data withheld due to low population and/or case counts

Table 12 – Adult/Adolescent Living HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2018

		А	dult/Adolesce	nt Total Livir	ng HIV Case	es
Demographic Characteristics	Population Age 13+	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
Sex at Birth						
Male	188,086	627	68.9%	60.4%	333.4	299
Female	199,915	283	31.1%	60.4%	141.6	706
Gender						
Male		618	67.9%	60.8%		
Female		283	31.1%	60.4%		
Transgender Female		8	0.9%	25.0%		
Transgender Male		0	0.0%	0.0%		
Another Gender Identity		1	0.1%	100.0%		
Race/Ethnicity						
Hispanic	15,906	55	6.0%	56.4%	345.8	289
Non-Hispanic	372,094	855	94.0%	60.7%	229.8	435
American Indian/Alaska Native, only	1,045	0				
Asian, only	6,407	2	0.2%	100.0%	31.2	3,203
Black, only	62,396	504	55.4%	60.7%	807.7	123
Native Hawaiian/Other Pacific Islander, only	136	0				
White, only	296,469	282	31.0%	61.7%	95.1	1,051
Multiracial/Other	5,641	67	7.4%	55.2%	1,187.7	84
Total	388,001	910	100.0%	60.4%	234.5	426
Country of Birth						
United States	361,997	834	91.6%	60.7%	230.4	434
Foreign-Born	21,918	65	7.1%	61.5%	296.6	337
Africa		11	1.2%	63.6%		
Asia		2	0.2%	100.0%		
Caribbean		31	3.4%	48.4%		
Central America		14	1.5%	85.7%		
Other		7	0.8%	57.1%		
Unknown		11	1.2%	36.4%		
Total	383,914	910	100.0%	60.4%	237.0	421

Note. Population data by sex at birth, age, and race/ethnicity are from the 2017 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2016 American Community Survey.

<u>Table 13 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2018</u>

			Adult/Adole	escent Tota	l Living Hi	[V Cases		
				Recent C	D4 Test R	esult		
Demographic Characteristics	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Sex at Birth								
Male	627	468	74.6%	569	9.0%	13.9%	18.6%	58.5%
Female	283	222	78.4%	642	9.5%	9.9%	15.3%	65.3%
Gender								
Male	618	***	***	***	***	***	***	***
Female	283	***	***	***	***	***	***	***
Transgender Female	8	***	***	***	***	***	***	***
Transgender Male	0							
Another Gender Identity	1	***	***	***	***	***	***	***
Race/Ethnicity								
Hispanic	55	37	67.3%	553	16.2%	16.2%	13.5%	54.1%
Non-Hispanic	855	653	76.4%	590	8.7%	12.4%	17.8%	61.1%
American Indian/Alaska Native, only	0							
Asian, only	2	***	***	***	***	***	***	***
Black, only	504	386	76.6%	591	8.8%	13.5%	17.9%	59.8%
Native Hawaiian/Other Pacific Islander, only	0							
White, only	282	210	74.5%	606	8.1%	9.5%	19.0%	63.3%
Multiracial/Other	67	***	***	***	***	***	***	***
Country of Birth								
United States	834	639	76.6%	598	8.9%	11.4%	18.0%	61.7%
Foreign-Born	65	41	63.1%	459	14.6%	26.8%	14.6%	43.9%
Africa	11	7	63.6%	726	14.3%	0.0%	14.3%	71.4%
Asia	2	***	***	***	***	***	***	***
Caribbean	31	20	64.5%	384	15.0%	35.0%	20.0%	30.0%
Central America	14	8	57.1%	558	25.0%	12.5%	0.0%	62.5%
Other	7	***	***	***	***	***	***	***
Unknown	11	10	90.9%	636	0.0%	30.0%	0.0%	70.0%
Total	910	690	75.8%	589	9.1%	12.6%	17.5%	60.7%

^{***} Data withheld due to low population and/or case counts

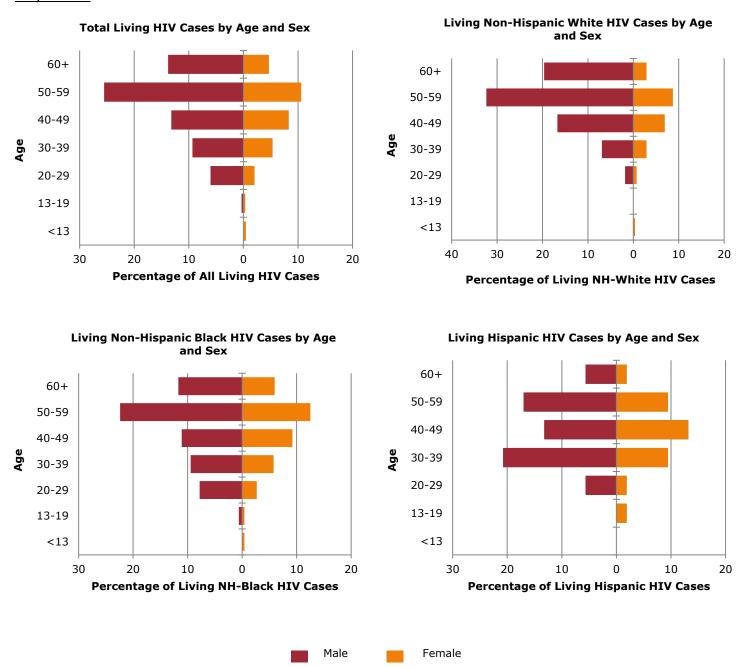
<u>Table 14 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2018</u>

	Adult/Adolescent Total Living HIV Cases								
Demographic Characteristics			Recent Viral L	oad Test Result					
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Sex at Birth									
Male	627	477	76.1%	88.7%	6,915				
Female	283	224	79.2%	85.3%	14,030				
Gender									
Male	618	***	***	***	***				
Female	283	***	***	***	***				
Transgender Female	8	***	***	***	***				
Transgender Male	0								
Another Gender Identity	1	***	***	***	***				
Race/Ethnicity									
Hispanic	55	39	70.9%	82.1%	14,030				
Non-Hispanic	855	662	77.4%	87.9%	11,701				
American Indian/Alaska Native, only	0								
Asian, only	***	***	***	***	***				
Black, only	504	391	77.6%	84.4%	6,250				
Native Hawaiian/Other Pacific Islander, only	0								
White, only	282	214	75.9%	93.0%	32,930				
Multiracial/Other	***	***	***	***	***				
Country of Birth									
United States	834	645	77.3%	88.4%	6,790				
Foreign-Born	65	46	70.8%	78.3%	35,169				
Africa	11	7	63.6%	85.7%	97,600				
Asia	***	***	***	***	***				
Caribbean	31	23	74.2%	69.6%	28,680				
Central America	14	9	64.3%	88.9%	3,460,000				
Other	***	***	***	***	***				
Unknown	11	10	90.9%	80.0%	27,115				
Total	910	701	77.0%	87.6%	12,002				

^{***} Data withheld due to low population and/or case counts

Section VII - HIV Cases by Expanded Demographics

<u>Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on December 31, 2017and Reported through June 30, 2018</u>



<u>Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on December 31, 2017, and Reported through June 30, 2018</u>

Total Living Male HIV Cases									
Age on			Race/E	thnicity		Total Males			
December 31, 2017		Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	by Age Group			
	Population	3,262	6,493	21,661	2,614	34,030			
<13 (Pediatric)	Cases	0	0	0	0	0			
<13 (Pediatric)	Rate	0.0	0.0	0.0	0.0	0.0			
	Ratio (1 in X)								
	Population	1,413	4,164	14,141	1,194	20,912			
12.10	Cases	0	4	0	1	5			
13-19	Rate	0.0	96.1	0.0	83.8	23.9			
	Ratio (1 in X)		1,041		1,194	4,182			
	Population	1,881	6,436	20,063	1,180	29,560			
20.20	Cases	5	44	8	7	64			
20-29	Rate	265.8	683.7	39.9	593.2	216.5			
	Ratio (1 in X)	376	146	2,507	168	461			
	Population	2,098	4,550	17,503	840	24,991			
20.20	Cases	9	49	20	8	86			
30-39	Rate	429.0	1,076.9	114.3	952.4	344.1			
	Ratio (1 in X)	233	92	875	105	290			
	Population	1,446	4,111	19,094	903	25,554			
40.40	Cases	10	50	43	10	113			
40-49	Rate	691.6	1,216.2	225.2	1,107.4	442.2			
	Ratio (1 in X)	144	82	444	90	226			
	Population	969	4,790	25,937	816	32,512			
	Cases	7	103	93	17	220			
50-59	Rate	722.4	2,150.3	358.6	2,083.3	676.7			
	Ratio (1 in X)	138	46	278	48	147			
	Population	699	6,202	46,492	1,164	54,557			
	Cases	2	72	58	7	139			
60+	Rate	286.1	1,160.9	124.8	601.4	254.8			
	Ratio (1 in X)	349	86	801	166	392			
	Population	11,768	36,746	164,891	8,711	222,116			
Total Males by	Cases	33	322	222	50	627			
Race/Ethnicity	Rate	280.4	876.3	134.6	574.0	282.3			
	Ratio (1 in X)	356	114	742	174	354			
	. ,								

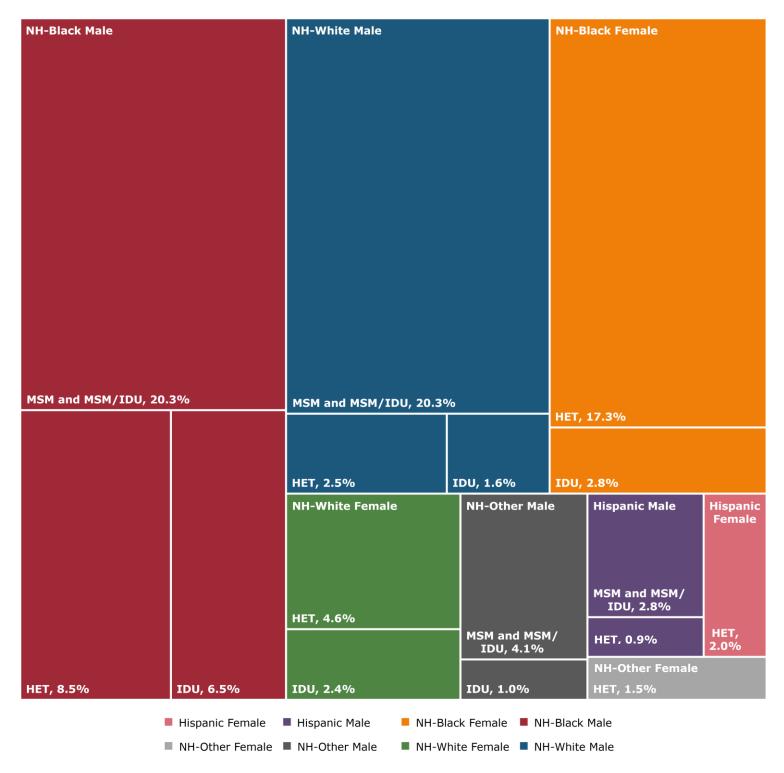
<u>Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on December 31, 2017, and Reported through June 30, 2018</u>

Total Living Female HIV Cases									
Age on			Race/Ethnicity						
December 31, 2017		Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	Total Females by Age Group			
	Population	3,370	6,450	20,653	2,386	32,858			
412 (D-di-t-i-)	Cases	0	2	2	0	4			
<13 (Pediatric)	Rate	0.0	31.0	9.7	0.0	12.2			
	Ratio (1 in X)		3,224	10,326		8,214			
	Population	1,355	3,959	13,899	1,281	20,495			
12.10	Cases	1	3	0	0	4			
13-19	Rate	73.8	75.8	0.0	0.0	19.5			
	Ratio (1 in X)	1,355	1,319			5,123			
	Population	1,521	6,022	20,394	1,579	29,516			
20.20	Cases	2	11	3	3	19			
20-29	Rate	131.5	182.7	14.7	190.0	64.4			
	Ratio (1 in X)	760	547	6,798	526	1,553			
	Population	1,663	4,512	17,747	1,049	24,971			
20.20	Cases	6	26	7	6	45			
30-39	Rate	360.8	576.2	39.4	572.0	180.2			
	Ratio (1 in X)	277	173	2,535	174	554			
	Population	1,330	4,186	20,190	955	26,661			
10.10	Cases	***	51	19	***	79			
40-49	Rate	***	1,218.3	94.1	***	296.3			
	Ratio (1 in X)	***	82	1,062	***	337			
	Population	766	5,193	27,312	922	34,193			
	Cases	***	57	22	***	89			
50-59	Rate	***	1,097.6	80.6	***	260.3			
	Ratio (1 in X)	***	91	1,241	***	384			
	Population	765	8,270	53,697	1,347	64,079			
	Cases	***	34	9	***	47			
60+	Rate	***	411.1	16.8	***	73.3			
	Ratio (1 in X)	***	243	5,966	***	1,363			
	Population	10,770	38,592	173,892	9,519	232,773			
Total Females by	Cases	22	184	62	19	287			
Race/Ethnicity	Rate	204.3	476.8	35.7	199.6	123.3			
,	Ratio (1 in X)	489	209	2,804	501	811			

^{***} Data withheld due to low population and/or case counts

Section VIII - HIV Exposure Category

<u>Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2017, Reported through June 30, 2018</u>



Note. Other exposure category and perinatal transmission not shown (<2 percent). Multiple imputation was used to estimate and adjust for missing transmission category.

<u>Table 17 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Estimated or Reported Exposure Category and Sex at Birth, Reported through June 30, 2018</u>

		Adult/Adolescent Reported HIV Diagnoses							
Estimated or Reported Exposure Category	NI-	% of	Linked t	o Care	Late HIV Diagnoses		D4 Test sult		
Category	No.	Total	% 1 mo.	% 3 mo.	%	%	Median Count		
Male-to-male Sexual Contact (MSM)	21	68.7%	81.2%	90.6%	9.4%	95.3%	427		
Injection Drug Use (IDU)	2	7.4%	100.0%	100.0%	43.5%	13.0%	268		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	1	0.6%	100.0%	100.0%	0.0%	100.0%	268		
Heterosexual Contact (HET)	7	23.2%	86.1%	86.1%	13.9%	86.1%	273		
Perinatal Transmission	0	0.0%							
Other Exposures	0	0.0%							
No Estimated or Reported Exposure	0	0.0%							
Total	31	100.0%	83.9%	90.3%	12.9%	87.1%	424		
Male Estimated or Reported Exposure Category									
Male-to-male Sexual Contact (MSM)	21	88.8%	81.2%	90.6%	9.4%	95.3%	427		
Injection Drug Use (IDU)	1	5.0%	100.0%	100.0%	0.0%	16.7%	268		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	1	0.8%	100.0%	100.0%	0.0%	100.0%	268		
Heterosexual Contact (HET)	1	5.4%	100.0%	100.0%	0.0%	100.0%	273		
Perinatal Transmission	0	0.0%							
Other Exposures	0	0.0%							
No Estimated or Reported Exposure	0	0.0%							
Total	24	100.0%	83.3%	91.7%	8.3%	91.7%	426		
Female Estimated or Reported Exposure Category									
Injection Drug Use (IDU)	1	15.7%	100.0%	100.0%	90.9%	9.1%	781		
Heterosexual Contact (HET)	6	84.3%	83.1%	83.1%	16.9%	83.1%	285		
Perinatal Transmission	0	0.0%							
Other Exposures	0	0.0%							
No Estimated or Reported Exposure	0	0.0%							
Total	7	100.0%	85.7%	85.7%	28.6%	71.4%	285		

Note. Data for 2017 are preliminary because they are based on a 6-month reporting delay and should not be used to assess trends. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

<u>Table 18 – Adult/Adolescent Living HIV Cases Alive on December 31, 2017, by Estimated or Reported Exposure Category and Sex at Birth, Reported through June 30, 2018</u>

	Adult/Adolescent Total Living HIV Cases				
Estimated or Reported Exposure Category	No.	% of Total	% Living with AIDS		
Male-to-male Sexual Contact (MSM)	394	43.2%	55.1%		
Injection Drug Use (IDU)	134	14.7%	72.7%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	37	4.0%	62.7%		
Heterosexual Contact (HET)	330	36.3%	62.0%		
Perinatal Transmission	12	1.3%	50.0%		
Other Exposures	2	0.2%	100.0%		
No Estimated or Reported Exposure	2	0.2%	0.0%		
Total	910	100.0%	60.4%		
Male Estimated or Reported Exposure Category					
Male-to-male Sexual Contact (MSM)	394	62.8%	55.1%		
Injection Drug Users (IDU)	77	12.3%	77.6%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	37	5.8%	62.7%		
Heterosexual Contact (HET)	114	18.1%	65.1%		
Perinatal Transmission	3	0.5%	100.0%		
Other Exposures	2	0.3%	100.0%		
No Estimated or Reported Exposure	1	0.2%	0.0%		
Total	627	100.0%	60.4%		
Female Estimated or Reported Exposure Category					
Injection Drug Use (IDU)	57	20.0%	66.0%		
Heterosexual Contact (HET)	216	76.4%	60.4%		
Perinatal Transmission	9	3.2%	33.3%		
Other Exposures	0	0.0%	0.0%		
No Estimated or Reported Exposure	1	0.4%	0.0%		
Total	283	100.0%	60.4%		

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

<u>Table 19 – Adult/Adolescent Total Living HIV Cases by Estimated or Reported Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2017, and Reported through June 30, 2018</u>

_	Adult/Adolescent Total Living HIV Cases									
Estimated or Reported Exposure –	Race/Ethnicity									
Category	His	spanic	Non-Hispar	nic, Black, only	Non-Hispanic, White, only					
	No.	% of Total	No.	% of Total	No.	% of Total				
Male-to-male Sexual Contact (MSM)	22	40.0%	172	34.1%	169	60.0%				
Injection Drug Use (IDU)	4	8.0%	79	15.7%	36	12.7%				
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	1	1.8%	18	3.6%	8	3.0%				
Heterosexual Contact (HET)	27	48.4%	225	44.6%	63	22.5%				
Perinatal Transmission	1	1.8%	9	1.8%	2	0.7%				
Other Exposures	0	0.0%	0	0.0%	2	0.7%				
No Estimated or Reported Exposure	0	0.0%	1	0.2%	1	0.4%				
Total	55	100.0%	504	100.0%	282	100.0%				
Male-to-male Sexual Contact (MSM) Injection Drug Use (IDU)	22 1	66.7% 4.2%	172 52	53.3% 16.3%	169 15	76.3% 6.8%				
· , ,						76.3%				
Male-to-male Sexual Contact and	1	3.0%	18	5.6%	8	3.8%				
Injection Drug Use (MSM/IDU)										
Heterosexual Contact (HET)	9	26.1%	77	23.9%	26	11.8%				
Perinatal Transmission	0	0.0%	3	0.9%	0	0.0%				
Other Exposures	0	0.0%	0	0.0%	2	0.9%				
No Estimated or Reported Exposure	0	0.0%	0	0.0%	1	0.5%				
Total	33	100.0%	322	100.0%	222	100.0%				
Female Estimated or Reported Exposure Category										
Injection Drug Use (IDU)	3	13.6%	27	14.8%	21	34.5%				
Heterosexual Contact (HET)	18	81.8%	148	81.4%	37	62.2%				
Perinatal Transmission	1	4.5%	6	3.3%	2	3.3%				
Other Exposures	0	0.0%	0	0.0%	0	0.0%				
No Estimated or Reported Exposure	0	0.0%	1	0.5%	0	0.0%				
Total	22	100.0%	182	100.0%	60	100.0%				

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

<u>Table 20 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on</u>
<u>December 31, 2017, by Estimated or Reported Exposure Category, Reported through</u>
June 30, 2018

			Adult/Add	olescent Tot	al Living	HIV Cases	es .						
Estimated or Reported Exposure	Recent CD4 Test Results												
Category	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+					
Male-to-male Sexual Contact (MSM)	394	293	74.5%	580	8.5%	12.2%	18.8%	60.5%					
Injection Drug Use (IDU)	134	100	74.4%	621	11.0%	6.2%	16.6%	66.1%					
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	37	30	82.5%	519	3.3%	23.6%	18.3%	54.8%					
Heterosexual Contact (HET)	330	257	77.9%	592	9.7%	13.9%	17.1%	59.3%					
Perinatal Transmission	12	7	58.3%	1025	14.3%	0.0%	0.0%	85.7%					
Other Exposures	2	1	50.0%	348	0.0%	100.0%	0.0%	0.0%					
No Estimated or Reported Exposure	2	2	100.0%	510	0.0%	50.0%	0.0%	50.0%					
Total	910	690	75.8%	589	9.1%	12.6%	17.5%	60.7%					

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment.

<u>Table 21 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Estimated or Reported Exposure Category, Reported through June 30, 2018</u>

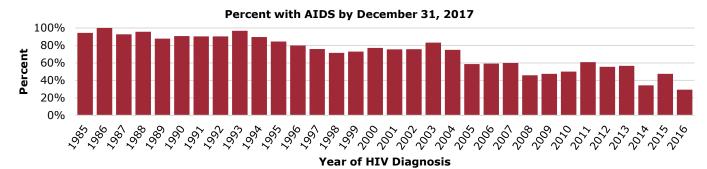
_	Adult/Adolescent Total Living HIV Cases							
Estimated or Reported Exposure		Recent Viral Load Test Results						
Category	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
Male-to-male Sexual Contact (MSM)	394	304	77.2%	87.2%	6,670			
Injection Drug Use (IDU)	134	100	74.3%	89.4%	8,405			
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	37	30	82.5%	89.4%	1,010			
Heterosexual Contact (HET)	330	257	78.0%	87.4%	18,200			
Perinatal Transmission	12	7	58.3%	71.4%	50,215			
Other Exposures	2	1	50.0%	100.0%				
No Estimated or Reported Exposure	2	2	100.0%	100.0%				
Total	910	701	77.0%	87.6%	12,002			

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median unsuppressed is weighted based on statistical adjustment.

Section IX - Disease Progression and Mortality

<u>Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2016, Reported through June 30, 2018</u>

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by December 31, 2016 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by December 31, 2017 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by December 31, 2017, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2016, as Reported by Name through June 30, 2018

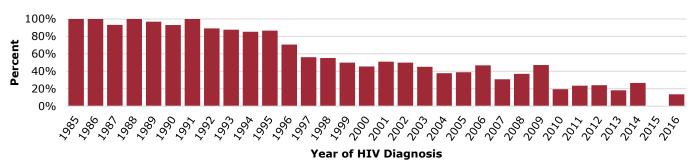


_	Adult/Adolescent Reported HIV Diagnoses									
Year of		Rai	oorted AIDS Diac	INOSAS	Percer		S by Years A	fter HIV		
HIV		ite _l	Joi tea A1D3 Diag	•		Diagnosis				
Diagnosis	No.			Mean Years						
J		No.	% with AIDS	from HIV to AIDS	1 Year	2 Years	5 Years	10 Years		
<1985	8	8	100.0%	0.9	87.5%	87.5%	87.5%	100.0%		
1985	18	17	94.4%	3.5	61.1%	61.1%	66.7%	88.9%		
1986	18	18	100.0%	2.9	55.6%	61.1%	77.8%	94.4%		
1987	41	38	92.7%	4.9	34.1%	34.1%	58.5%	78.0%		
1988	45	43	95.6%	3.8	51.1%	53.3%	71.1%	82.2%		
1989	73	64	87.7%	3.6	39.7%	45.2%	58.9%	84.9%		
1990	54	49	90.7%	3.9	35.2%	38.9%	57.4%	83.3%		
1991	73	66	90.4%	3.3	42.5%	46.6%	64.4%	84.9%		
1992	62	56	90.3%	3.9	43.5%	50.0%	67.7%	80.6%		
1993	60	58	96.7%	2.4	53.3%	66.7%	83.3%	91.7%		
1994	78	70	89.7%	2.2	62.8%	66.7%	75.6%	82.1%		
1995	71	60	84.5%	2.2	52.1%	59.2%	73.2%	81.7%		
1996	45	36	80.0%	3.5	40.0%	44.4%	55.6%	73.3%		
1997	54	41	75.9%	1.7	57.4%	59.3%	70.4%	72.2%		
1998	63	45	71.4%	3.8	39.7%	41.3%	50.8%	58.7%		
1999	59	43	72.9%	1.9	55.9%	57.6%	61.0%	67.8%		
2000	35	27	77.1%	2	51.4%	51.4%	65.7%	71.4%		
2001	53	40	75.5%	1.2	58.5%	62.3%	66.0%	75.5%		
2002	37	28	75.7%	1.8	54.1%	59.5%	64.9%	70.3%		
2003	48	40	83.3%	1.7	62.5%	64.6%	72.9%	81.3%		
2004	44	33	75.0%	2.2	50.0%	50.0%	61.4%	72.7%		
2005	46	27	58.7%	0.9	50.0%	50.0%	54.3%	58.7%		
2006	49	29	59.2%	1.4	46.9%	46.9%	53.1%	59.2%		
2007	35	21	60.0%	0.9	51.4%	51.4%	57.1%	60.0%		
2008	37	17	45.9%	2.2	29.7%	32.4%	35.1%			
2009	40	19	47.5%	0.9	42.5%	42.5%	42.5%			
2010	40	20	50.0%	1.6	35.0%	37.5%	40.0%			
2011	46	28	60.9%	0.4	54.3%	56.5%	60.9%			
2012	27	15	55.6%	0.7	48.1%	48.1%	55.6%			
2013	30	17	56.7%	0.3	53.3%	53.3%				
2014	35	12	34.3%	0.5	28.6%	31.4%				
2015	40	19	47.5%	0.2	47.5%	47.5%				
2016	41	12	29.3%	0.3	26.8%					
Total	1,505	1,116	74.2%	2.4	47.6%	50.7%	60.3%	70.0%		

<u>Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2016, Reported through June 30, 2018</u>

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by December 31, 2016 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by December 31, 2017 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by December 31, 2017, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2016, as Reported by Name through June 30, 2018





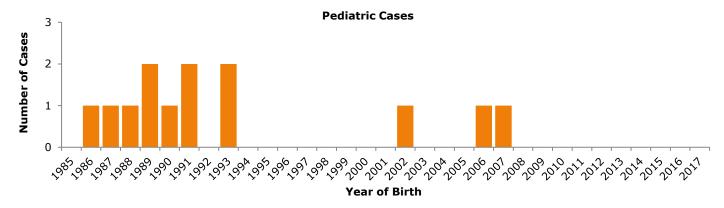
		Adult/Adolescent Reported AIDS Diagnoses Reported AIDS Deaths Percent Alive by Years After AIDS Diagnosis								
Year of	_	Rep	orted AIDS D		Percent	Alive by Year	s After AIDS	Diagnosis		
AIDS Diagnosis	No.	No.	% Dead	Mean Years from AIDS to Death	1 Year	2 Years	5 Years	10 Years		
<1985	7	7	100.0%	0.4	14.3%	0.0%	0.0%	0.0%		
1985	10	10	100.0%	0.5	30.0%	0.0%	0.0%	0.0%		
1986	9	9	100.0%	0.8	33.3%	22.2%	0.0%	0.0%		
1987	15	14	93.3%	2.5	60.0%	40.0%	13.3%	13.3%		
1988	22	22	100.0%	1.9	63.6%	31.8%	9.1%	0.0%		
1989	32	31	96.9%	2.4	59.4%	46.9%	15.6%	6.3%		
1990	29	27	93.1%	2.7	75.9%	51.7%	24.1%	6.9%		
1991	37	37	100.0%	2.5	73.0%	40.5%	16.2%	2.7%		
1992	37	33	89.2%	2.4	62.2%	40.5%	18.9%	16.2%		
1993	57	50	87.7%	2.8	77.2%	54.4%	28.1%	15.8%		
1994	82	70	85.4%	4.5	75.6%	63.4%	40.2%	25.6%		
1995	60	52	86.7%	5.1	71.7%	61.7%	46.7%	26.7%		
1996	41	29	70.7%	4.4	78.0%	73.2%	53.7%	36.6%		
1997	57	32	56.1%	6.9	89.5%	82.5%	71.9%	57.9%		
1998	47	26	55.3%	4.6	85.1%	80.9%	63.8%	51.1%		
1999	44	22	50.0%	5.5	95.5%	88.6%	72.7%	56.8%		
2000	33	15	45.5%	5.9	84.8%	78.8%	72.7%	69.7%		
2001	51	26	51.0%	4.8	80.4%	78.4%	68.6%	60.8%		
2002	28	14	50.0%	5.1	82.1%	78.6%	67.9%	64.3%		
2003	42	19	45.2%	2.8	78.6%	71.4%	66.7%	54.8%		
2004	29	11	37.9%	3.8	89.7%	82.8%	75.9%	65.5%		
2005	36	14	38.9%	3.2	83.3%	83.3%	72.2%	63.9%		
2006	32	15	46.9%	3.1	78.1%	75.0%	65.6%	53.1%		
2007	26	8	30.8%	3.1	88.5%	88.5%	76.9%	69.2%		
2008	35	13	37.1%	2.7	82.9%	80.0%	71.4%			
2009	17	8	47.1%	1.1	64.7%	58.8%	58.8%			
2010	31	6	19.4%	2.7	93.5%	90.3%	87.1%			
2011	34	8	23.5%	3.1	91.2%	91.2%	79.4%			
2012	29	7	24.1%	0.7	82.8%	79.3%	75.9%			
2013	22	4	18.2%	0.3	81.8%	81.8%				
2014	15	4	26.7%	0.1	73.3%	73.3%				
2015	27	0	0.0%		100.0%	100.0%				
2016*	22	3	13.6%	0.6	90.9%					
Total	1,095	646	59.0%	3.6	78.9%	69.7%	55.9%	46.3%		

*2016 AIDS deaths are preliminary

Section X - Pediatric Cases

<u>Figure 13 – Trends in Pediatric HIV Cases, 1985-2017, Reported through June 30, 2018</u>

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2017, as Reported by Name through June 30, 2018



V		Pediatric Reporte	ed HIV Diagnoses		Pediatric Total Living HIV Cases
Year	No. by Year of Birth	No. by Year of HIV Diagnosis	No. by Year of AIDS Diagnosis	No. by Year of Death	No. Alive on December 31st of Each Year
<1985	6	0	0	0	
1985	0	1	1	0	1
1986	1	1	0	0	2
1987	1	0	0	0	2
1988	1	1	0	0	3
1989	2	0	0	1	2
1990	1	1	0	0	3
1991	2	5	1	0	8
1992	0	3	2	1	10
1993	2	1	1	0	11
1994	0	1	2	0	12
1995	0	0	0	2	10
1996	0	1	2	1	8
1997	0	1	0	0	9
1998	0	0	0	0	
1999	0	0	0	0	9
2000	0	0	0	0	9 9 9
2001	0	0	1	0	9
2002	1	0	1	0	9
2003	0	0	0	0	9
2004	0	0	0	0	9
2005	0	0	0	0	9
2006	1	0	0	1	8
2007	1	1	0	0	9
2008	0	0	1	0	9
2009	0	1	0	0	10
2010	0	1	0	0	12
2011	0	0	0	0	12
2012	0	0	0	0	12
2013	0	0	0	0	12
2014	0	0	0	0	12
2015	0	0	0	0	12
2016	0	0	0	0	13
2017	0	0	0	0	13
Total	19	19	12	6	

<u>Table 22 – Current Pediatric HIV Total Living HIV Cases, Alive on December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30, 2018</u>

Tourisdiction of Comment Posidones	Current Pediatric Total Living HIV Cases				
Jurisdiction of Current Residence	No.	% of Total			
Caroline	0	0.0%			
Cecil	2	66.7%			
Dorchester	1	33.3%			
Kent	0	0.0%			
Queen Anne's	0	0.0%			
Somerset	0	0.0%			
Talbot	0	0.0%			
Wicomico	0	0.0%			
Worcester	0	0.0%			
Total	3	100.0%			

<u>Table 23 – Current Pediatric HIV Total Living HIV Cases, Alive on December 31, 2017, by Sex at Birth and Race/Ethnicity, Reported through June 30, 2018</u>

Demographic Characteristic	Current Pediatric Total Living HIV Cases	
	No.	% of Total
Sex at Birth		
Male	0	0.0%
Female	3	100.0%
Race/Ethnicity		
Hispanic	0	0.0%
Non-Hispanic	3	100.0%
American Indian/ Alaska Native, only	0	0.0%
Asian, only	0	0.0%
Black, only	1	33.3%
Native Hawaiian/Other Pacific Islander, only	0	0.0%
White, only	2	66.7%
Multiracial/Other	0	0.0%
Total	3	100.0%

Glossary of Terms

Adult/Adolescent Living HIV Cases with AIDS: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, with an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Adult/Adolescent Living HIV Cases without AIDS: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Adult/Adolescent Reported AIDS Diagnoses: Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Adult/Adolescent Reported HIV Diagnoses: Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Adult/Adolescent Total Living HIV Cases: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

Age on [date]: Age group of living cases on the specified date.

AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

Corrections: Residence in a state or federal prison. Does not include local jails and detention centers.

Current Residence: Jurisdiction of residence from the most recent report since January 1, 2009.

First CD4 Test Result Median Count: Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

First CD4 Test Result Percent: Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

Gender Expression: people's outward presentation of their gender which may or may not conform to socially defined behaviors and characteristics typically associated with being either masculine or feminine.

Gender Identity: refers to one's internal understanding of one's own gender, or the gender with which a person identifies.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since January 1, 2009.

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

Jurisdiction of Residence at Diagnosis: Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

Late HIV Diagnosis: Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Linked to Care: Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

Living HIV Cases with AIDS: Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Living HIV Cases without AIDS: Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Mean Years from HIV Diagnosis: Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

Mean Years from AIDS diagnosis to AIDS Death: Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

Median Count: Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

Median Unsuppressed: Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

Pediatric Total Living HIV Cases: Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Percent Change: The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

Percent Alive by Years after AIDS Diagnosis: Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

Percent Late HIV Diagnosis: Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Percent Suppressed: Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

Percent Living with AIDS: The percent of reported HIV diagnoses with an AIDS diagnosis not reported to have died as of December 31st of the specified year

Percent with AIDS by Years after HIV Diagnosis: Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

Population: Population estimate for July 1, 2017.

Population Age 13+: Population age 13 years or older, estimate for July 1, 2017.

Rate: Number of HIV cases divided by the population and multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Reported AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Residence at Diagnosis: Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

Retained in HIV Care: HIV diagnosed with a reported CD4 or viral load test result performed or reported antiretroviral use in the specified year.

Suppressed Viral Load: HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

Total Living HIV Cases: Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Transgender Female: A person whose sex assigned at birth is male but whose gender identity is female.

Transgender Male: A person whose sex assigned at birth is female but whose gender identity is male.

Another Gender Identity: Additional gender identities or gender expressions.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.